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ABSTRACT

This report examines the progress of Maryland's Joint Coordinating Committee for Occupational Education Programs in developing a systematic procedure for the evaluation of the quality of occupational programs in Maryland's community colleges. After presenting the 1976 resolution which established the joint committee of the Maryland State Board for Community Colleges (SBCC) and the Maryland State Board of Education, the fiscal year 1986 project summary is provided. The summary presents procedures and results for the following objectives: (1) to conduct statewide projects related to data on credit enrollment, degree recipients, graduate follow-up, leaver (entrant) follow-up, employer follow-up, discipline cost analysis, continuing education data system, and program inventory; (2) to run the SBCC Program Data Monitoring System and review each of the career programs by June 15, 1986; and (3) to publish an in-depth evaluation of 53 community college programs by March 15, 1986, and a statewide evaluation of data processing programs. Tables are provided of the program areas designated for evaluation between 1978 and 1985; and the programs designated for qualitative evaluation in 1986 and the reasons they were selected. Guides for users of the Program Data Monitoring System and for using information to support instructional program evaluation are appended. (LAL)

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THE IMPROVEMENT OF OCCUPATIONAL EDUCATION IN MARYLAND

A Progress Report
FISCAL YEAR 1986

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JC 860 474

Maryland State Board for Community Colleges

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THE IMPROVEMENT
OF OCCUPATIONAL EDUCATION
IN MARYLAND

A Progress Report

Fiscal Year 1986

DIRECTED BY:	Maryland State Board for Community Colleges
FUNDING GRANTED BY:	Division of Vocational-Technical Education Maryland State Department of Education
PROJECT DIRECTOR:	Lawrence A. Nespoli

September 1986
Annapolis, Maryland 21401

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Resolution

ESTABLISHMENT OF JOINT COORDINATING COMMITTEE
FOR OCCUPATIONAL EDUCATION PROGRAMS
MARYLAND STATE BOARD OF EDUCATION -
MARYLAND STATE BOARD FOR COMMUNITY COLLEGES

WHEREAS, The Maryland State Board for Community Colleges and the Maryland State Board of Education, in order to improve, expand, and coordinate their individual and joint efforts in the development, achievement, and support of high-quality occupational programs and services in postsecondary education for the citizens of Maryland; and

WHEREAS, A joint commitment of these two agencies to regular and systematic cooperation and coordination will assure the achievement of certain key objectives;

NOW, THEREFORE, BE IT RESOLVED That the State Board for Community Colleges and the Maryland State Board of Education will link efforts to achieve the following objectives:

1. Coordinate staff efforts through active dialogue and information-sharing concerning curriculum, facilities, personnel development, fiscal matters, and appropriate technical assistance in the occupational area;

2. Coordinate appropriate interrelated informational components within information systems;

3. Systematic sharing of relevant communication pertaining to specific occupational projects undertaken by community colleges;

4. Jointly develop, publish, and disseminate informational program materials and brochures highlighting occupational programs in Maryland community colleges;

5. Establish a joint coordinating committee for occupational education to foster interagency planning on annual and long-range master planning.

Approved:
State Board of Education, April 28, 1976
State Board for Community Colleges, May 13, 1976

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PROJECT SUMMARY
FISCAL YEAR 1986

PROJECT TITLE

Management Information System and Program Evaluation, Activity No. 3.II.1.5.2.

PROBLEM

A valid and reliable student data base is needed for planning, decision making, and Vocational Education Data System (VEDS) reporting. A systematic and objective procedure is needed to evaluate the quality of occupational programs in Maryland community colleges.

OBJECTIVE NO. 1

To conduct the following statewide projects, including the preparation of computer files and publication of a report for each study:

Credit enrollment
Degree recipients
Graduate follow-up
Leaver (entrant) follow-up
Employer follow-up
Discipline cost analysis
Continuing education data system
Program inventory

PROCEDURES AND RESULTS

Credit Enrollment. Opening Fall enrollment is reported using a system of computer tapes from the colleges. In addition to demographic data about each student, the student's program of study and credit hours carried are reported. All seventeen community colleges submitted tapes or coding forms in Fall 1985. Data were published in the State Board for Community College (SBCC) State Plan for Community Colleges and in the Databook.

Certificates and Degrees Awarded. The number of students who complete programs during the fiscal year are reported by college by program. Trends in the mix of occupational and transfer degrees are analyzed. Colleges submit the degree data on computer tapes or coding forms with one record per graduate. A report on characteristics of community college graduates was presented in the SBCC Bulletin. Degree trends were analyzed in the Databook.

Graduate Follow-Up. The statewide graduate follow-up study surveys persons about nine months after program completion. The study is a joint project of the community colleges and the SBCC and uses a standard questionnaire mailed in odd-numbered years. In FY 1985, 8,219 graduates from 1984 were surveyed and an adjusted response rate of 50 percent was achieved. Each college has received a printout of its data, a statewide aggregation, and an aggregation of the responses of graduates from similar peer colleges. Crosstabulation by program

was provided to each college. A report of the 1984 graduates will be sent to the Division of Vocational-Technical Education as soon as it is completed.

Leaver Follow-Up. The statewide entrant follow-up study surveys persons two to four years after entry to the community college. The study uses a standard questionnaire mailed in even-numbered years. All first-time entrants from 1982 were surveyed in FY 1984, and an adjusted response rate of 37 percent was achieved. The results have been tabulated by the SBCC for the seventeen community colleges and have been used in a summary of information about student outcomes called the Performance Profile (see Attachment 1). The results also have been used in a number of Technical Memos, available upon request.

Employer Follow-Up. The statewide employer follow-up study surveys the employers of graduates who (1) completed an occupational program, (2) are employed full-time, (3) are in work related to their education, and (4) gave permission to contact their employer. The study is a joint project of the community colleges and the SBCC and uses a standard questionnaire mailed in odd-numbered years. Specific questions required by the VEDS are included in the survey. In FY 1985, employers of the 1984 community college graduates were surveyed and a response rate of 60 percent was achieved. Each college received printouts of its data, statewide results, and comparisons with previous employer surveys. A report utilizing the data from this employer survey and comparing the data with previous surveys has been completed and is attached to this Progress Report (see Attachment 2).

Discipline Cost Analysis. Costs and full-time equivalent students are reported for each discipline at each college. The data enable an analysis of trends in costs per FTE student in occupational disciplines. Colleges are provided with trend reports for their college, similar size colleges, and statewide. A Discipline Cost Analysis Manual has been developed and is revised periodically to clarify the procedures for preparing the cost data. Colleges report the data to the SBCC on a standard format tape in order to facilitate processing and accuracy of the data.

Continuing Education Data System. Enrollments and contact hours are reported to the SBCC for each approved noncredit course. Reports are generated showing the number of registrants and full-time equivalent reports are sent to the colleges and to the DVTE at the end of each year. Summary reports of enrollments in noncredit courses are included in the annual SBCC Databook.

The State Board for Community Colleges has implemented a computerized system for colleges to submit enrollment, course, and student demographic data in continuing education. This tape system provides software that generates a standard format file and produces management and aid transmittal reports at each college. The software was used by all colleges in FY 1986 to produce State reports and to produce an end-of-year data tape for the SBCC.

Program Inventory. The SBCC Program Inventory was updated in FY 1986 to reflect programs that were added, discontinued, or made inactive. The Program Inventory is the backbone of the SBCC Information System and is critical to the Program Data Monitoring System and to student follow-up studies. A crosswalk is used for the new federal Classification of Instructional Programs (CIP). Colleges will continue to report their enrollment, degrees, discipline cost analysis, employee data, and follow-up surveys using the present six-digit

State Board for Community Colleges and State Board for Higher Education subject codes. The SBCC and SBHE translate these program codes to CIP codes for any federal report which requires CIP codes.

Common Data Elements. In a statewide system of locally governed community colleges, each institution is free to develop its own data processing system. In order to ensure that data from each institution are comparable and to promote more efficient development of data systems, the Association of Data Processing Directors of Maryland Community Colleges has produced the Course Master Data Elements and Student Data Element Dictionary. This Data Element Dictionary has been continuously updated by the data processing directors and maintained by the State Board for Community Colleges on the SBCC computer file.

OBJECTIVES NO. 2 AND NO. 3.

To run the State Board for Community Colleges Program Data Monitoring System and review each of the career programs by June 15, 1986. (See Appendix A for a description of the SBCC PDM System.)

To publish an in-depth evaluation of fifty-three community college programs by March 15, 1986 and a statewide evaluation of data processing programs. (See Appendix B for a description of the SBCC Program Evaluation System.)

PROCEDURES AND RESULTS

Program Data Monitoring System. The 1986 printout of the Program Data Monitoring System was sent to college occupational deans and institutional researchers for confirmation of the data. Upon receipt of the corrections, a final printout was made and a copy was sent to the DVTE with one page per program at each college.

Enhancements are made to the PDM System every year. This year data were added about Fall 1985 enrollment, FY 1985 awards, and FY 1985 discipline costs. The 1985 Higher Education Cost Index was included in the Discipline Cost Analysis display of cost trends and the results for the 1984 graduates were added to the display of follow-up surveys. Finally, new job opening projections were added--specifically, the most recent Department of Employment and Training data showing annual openings projected by occupation through 1990.

Program Evaluation. The system for program evaluation is described at length in the Instructional Program Manual. (See Attachment 3.) Briefly, the SBCC reviews each program at each college every April using the Program Data Monitoring System. The PDM System displays trends in enrollments, awards, employment in field of training, student satisfaction, discipline costs, and job openings. Programs that appear to need a qualitative evaluation are identified and a letter asking specific questions is sent to the college presidents. The colleges prepare written responses, and the responses are compiled into a Program Evaluation Report reviewed by the State Board for Community Colleges in January.

The 189-page Program Evaluation Report was published in April 1986 and sent to the DVTE. (An additional copy is attached to this Progress Report; see Attachment 4.) After the eighth full cycle of program evaluations, 381 programs have been evaluated. Many programs have been improved through changes in curriculum, staffing, or recruitment. In addition, 78 programs have been discontinued. Table 1 shows the number of programs evaluated by year and by occupational program area.

In June 1986, 50 programs were identified for a qualitative evaluation in the ninth cycle of the Program Evaluation System to be conducted in FY 1987. Table 2 gives the names of the programs identified for a college evaluation and the primary reason(s) for the evaluation request.

Table I

PROGRAM AREAS DESIGNATED FOR EVALUATION
MARYLAND COMMUNITY COLLEGES
1978 - 1985

	Number of Active Programs		Programs Designated for Evaluation										Programs Discontinued 1978-1985	
			1978	1979	1980	1981	1982	1983	1984	1985	Total			
	#	%	#	#	#	#	#	#	#	#	#	%	#	%
TRANSFER	87	21	-	1	16	3	14	8	11	7	60	16	-	-
OCCUPATIONAL														
Business & Commerce	103	25	10	10	12	15	12	10	13	8	90	24	15	19
Data Processing	25	6	2	5	1	1	-	-	1	17	27	7	1	1
Health Services	68	17	8	6	1	11	7	6	6	9	54	14	14	18
Mechanical & Engineering	62	15	11	14	8	9	9	7	13	5	76	20	21	27
Natural Science	15	4	2	4	3	3	2	2	-	3	19	5	9	12
Public Service	49	12	4	5	7	10	4	15	6	4	55	14	18	23
TOTAL	409	100	37	45	48	52	48	48	50	53	381	100	78	100

Table 2

PROGRAMS DESIGNATED FOR QUALITATIVE EVALUATION
MARYLAND COMMUNITY COLLEGES
1986

College Program	Issue	HEGIS No.
ALLEGANY		
Media Technology	Low placement High cost Previous evaluation	5008-01
Nursing	Declining enrollment Low placement	5208-01
Electromechanical Technology	Declining enrollment Low placement	5311-01
ANNE ARUNDEL		
Nursing	Declining enrollment High cost	5208-01
Medical Assisting	Declining enrollment	5214-01
BALTIMORE		
Arts & Sciences Transfer	Declining enrollment Inadequate follow-up	4910-01
International Trade	Low enrollment Low awards Previous evaluation	5004-07
Mental Health Technology	Declining enrollment Declining awards Inadequate follow-up Previous evaluation	5216-01
Plant Engineering Technology	Low enrollment Low awards Inadequate follow-up Previous evaluation	5399-01
Legal Assistant	Low awards Inadequate follow-up Previous evaluation Statewide evaluation	5599-01

CATONSVILLE		
Printing Management Technology	Declining enrollment Low awards Inadequate follow-up Previous evaluation	5009-01
Occupational Safety & Health	Declining enrollment Declining awards Inadequate follow-up High cost	5299-06
Dialysis Technology	Low enrollment Low awards Previous evaluation	5299-07
Industrial Maintenance	Low awards Inadequate follow-up Previous evaluation	5312-02
CECIL		
Business & Commerce Technology	Inadequate follow-up Previous evaluation	5001-01
Professional Photography	Declining enrollment Inadequate follow-up	5007-01
CHARLES		
Drafting	Low enrollment Low awards Previous evaluation	5303-01
Pollution Abatement Technology	Low enrollment Low awards	5399-05
Nautical Science	Low enrollment	5406-05
CHESAPEAKE		
Industrial Mechanics Technology	Low enrollment Low awards	5312-02
Architectural & Drafting Technology	Declining enrollment Low awards Inadequate follow-up Previous evaluation	5317-01

DUNDALK		
General Studies Transfer	Low transfer performance Previous evaluation	4950-01
Accounting	Inadequate follow-up Previous evaluation	5002-01
Water Systems	Low enrollment Low awards	5399-05
Legal Assistant	Previous evaluation Statewide evaluation	5599-01
ESSEX		
Arts & Sciences Transfer	Low transfer performance Previous evaluation	4910-01
Arts Management	Low enrollment Low awards Inadequate follow-up	5001-02
Hotel-Motel/Restaurant Club Management	Low placement	5010-01
Podiatric Assistant	Low enrollment Low awards Inadequate follow-up Previous evaluation	5299-05
FREDERICK		
General Studies Transfer	Low transfer performance Previous evaluation	4950-01
Electronics Technology	Inadequate follow-up	5310-01
GARRETT		
Environmental & Renewable Resources	Declining enrollment Low awards Inadequate follow-up Previous evaluation	5401-01
Gerontology	Low enrollment Low awards	5599-02
HAGERSTOWN		
General Studies Transfer	Declining enrollment Low transfer performance Previous evaluation	4950-01
Executive Secretarial	Inadequate follow-up High cost	5005-01

HARFORD		
Accounting	Low placement High cost	5002-01
Insurance	Low enrollment Low award Inadequate follow-up Previous evaluation	5003-03
Mass Communications	Declining enrollment Low placement Previous evaluation	5008-01
HOWARD		
General Studies Transfer	Declining enrollment Declining awards Low transfer performance	4950-01
Secretarial Science	Declining enrollment Declining awards	5005-01
Nursing	Declining enrollment Declining awards Low placement High cost Previous evaluation	5208-01
MONTGOMERY		
Secretarial	Declining enrollment High cost	5005-01
Civil Engineering	Low enrollment Low awards Inadequate follow-up High cost	5309-01
Geography, Cartography & Community Planning	Low enrollment Low awards Inadequate follow-up Previous evaluation	5508-02
Legal Assistant	Inadequate follow-up High cost Statewide evaluation	5599-01

PRINCE GEORGE'S		
Respiratory Therapist	Declining enrollment Inadequate follow-up	5215-01
Medical Isotope Technology	Declining enrollment Inadequate follow-up High cost Previous evaluation	5299-02
Para-legal/Legal Assistant	Inadequate follow-up Statewide evaluation	5599-01
WOR-WIC TECH		
Secretarial Science	Low awards High cost	5005-01
Radiologic Technology	Low enrollment Low placement	5207-01

Appendix A

A GUIDE FOR USERS
OF THE PROGRAM DATA MONITORING SYSTEM

The State Board for Community Colleges Program Evaluation System was developed in cooperation with the community college presidents and approved by the Board in 1978. The system involves two steps: quantitative evaluation of each program each year by the SBCC, and qualitative evaluation of selected programs each year by the community colleges. The following information is given to assist in the interpretation of data on the Program Data Monitoring (PDM) printout: a display of enrollment, awards, follow-up, discipline cost, and manpower information.

Program Number and College Program Title. These items are taken from the current SBCC Program Inventory. Data are only shown on the PDM printout as related to programs and not according to program options. Data related to program options are included as part of the overall program. For example, a college may have a program in Electronics Technology with an option in Digital Electronics. Data related to the Digital Electronics option are included in the data with Electronics Technology.

Enrollment and Awards. Enrollment and awards data are obtained from Enrollment Information System (EIS) data tapes and from the Degree Data System tapes, respectively. The "FT ENR-TO-AWARD RATIO" is derived by taking one-half of the full-time enrollment in a given year and dividing that figure by the number of graduates two years later. For example, a program that had 100 full-time students in 1978 and 25 graduates in 1980 would have a ratio of 2:1. All student and discipline cost information on the PDM printout is submitted by the colleges, and changes are not made in that data without consulting the college.

Similar Programs. Enrollment and award data from the most recent year are shown for each college having the same program in order to show the scope of the programs at adjacent colleges and statewide.

Student Follow-Up Studies. Student follow-up studies are conducted jointly by the college and the SBCC, with the college responsible for mailing the questionnaires to students. The column 1982 Graduates refers to a study of all graduates of 1982 surveyed in Spring 1983. The statewide response rate among graduates actually receiving the questionnaire was 61 percent. The column 1984 Graduates refers to a similar survey conducted in 1985, with a response rate of 50 percent. All percentages in the follow-up section are simple percentages of the number of respondents, except the data "Among Full-time Employees" where blanks have been excluded from the denominator to arrive at the percentage. Graduate follow-up data are generally not interpreted when there are less than ten respondents. However, since the questionnaires were identical in both follow-up studies, the results from the two studies can be combined, if necessary, to get a more reliable picture of the graduates.

Annual Job Openings to 1990. The data were developed by the Maryland Department of Employment and Training, Research and Analysis Division.The

projections include annual openings due to growth and labor force separations by occupation through 1990. Statewide data are shown for all programs where relevant occupational data are available. In addition, Baltimore area data are shown for the Community College of Baltimore, Catonsville Community College, Dundalk Community College, and Essex Community College. The Baltimore area data includes Baltimore City, plus Anne Arundel, Baltimore, Carroll, Harford, and Howard Counties. Regional data are provided for Charles Community College (Calvert, Charles, and St. Mary's Counties), Chesapeake College (Caroline, Dorchester, Kent, Queen Anne's, and Talbot Counties), and Wor-Wic Tech Community College (Somerset, Wicomico, and Worcester Counties). For all other colleges, county data are provided.

Discipline Credit Hour Cost. Data are shown as reported in the SBCC Discipline Cost Analysis for the fiscal years shown. Basically, the discipline cost analysis accounts for all expenditures at the colleges (including federal) and attributes them to direct costs, compensation and class size. Additional direct costs include supplies and materials related to the teaching of that discipline, such as laboratory supplies. Indirect costs include general administration costs, including the library, student services, and utilities. Indirect costs are applied to all courses in proportion to the number of full-time equivalent students in the course. Cost data are shown for each discipline at a college and compared to the cost of that discipline statewide; costs are also shown for all disciplines at a college and compared to the cost of all disciplines statewide.

Procedure for Program Evaluation. Every April, the updated PDM printout is distributed to academic deans, occupational deans, and institutional research directors to verify the data. The SBCC staff then identifies several programs at each college that appear to be in some difficulty and in need of a qualitative evaluation. In general, selection is based upon enrollment, awards, and job placement, in that order. Discipline cost information is used in the context of the overall discipline cost at the college and the average cost of the discipline at other colleges.

The selection of programs for a qualitative evaluation is assisted by "flags" shown in the lower right corner of the PDM printout. The flags represent criteria checks on certain data, such as "Enrollment decreased at least 20 percent and by ten students last year." The flags were set with the help of community college academic deans, occupational deans, and institutional research directors. The flags are used by the SBCC staff to assist in selecting programs for a qualitative evaluation but are not the sole criteria for requesting a qualitative evaluation by the college.

The SBCC staff constructs questions to be addressed in the qualitative evaluation. Upon approval by the State Board for Community Colleges in June, the questions are sent to each college president. Colleges conduct the qualitative evaluations, respond to the questions raised, and submit a report to the SBCC. The SBCC publishes a report of all questions and responses. The report is distributed to the community colleges, to the State Board for Higher Education, to the State Department of Education, Division of Vocational-Technical Education, and to the Maryland State Council for Vocational-Technical Education.

COLLEGE: HARFORD COMMUNITY COLLEGE

COLLEGE PROGRAM TITLE	YEAR IMPLEMENTED	CURRENT STATUS	CIP NUMBER
CERTIFICATE: NOT OFFERED			
ASSOCIATE: NURSING	PRE 1974	ACTIVE	7030100

PROGRAM NUMBER: 5208 01
HEGIS PROGRAM CATEGORY: NURSING, RN

FALL ENROLLMENT:	1980	1981	1982	1983	1984	1985
CERTIFICATE LEVEL						
FULL-TIME	-	-	-	-	-	-
PART-TIME	-	-	-	-	-	-
ASSOCIATE LEVEL						
FULL-TIME	198	145	130	121	65	66
PART-TIME	330	330	397	395	342	265
TOTAL HEAD-COUNT	528	475	527	516	407	331
AWARDS:						
CERTIFICATES	-	-	-	-	-	-
ASSOCIATE DEGREES	72	98	88	71	86	77
TOTAL ALL AWARDS	72	98	88	71	86	77
PERCENT FULL-TIME	38%	31%	25%	23%	16%	20%
FT ENR-TO-AWARD RATIO			1:1	1:1	1:1	1:1
STATEWIDE FULL-TIME ENROLLMENT TO AWARD RATIO (RATIO = 1/2 FT ENROLLMENT DIVIDED BY AWARDS 2 YEARS LATER)						1:1

SIMILAR PROGRAMS IN MARYLAND COMMUNITY COLLEGES:

COLLEGE	ENROLLMENT FALL, 1985 FT	PT	TOTAL	AWARDS 84-85 CERT	AA	SCH YR TOTAL
ALLEGANY	144	101	245	-	103	103
ANNE ARUNDEL	60	414	474	-	71	71
BALTIMORE	58	138	196	-	39	39
CATONSVILLE	119	622	741	-	135	135
CECIL	33	83	116	-	25	25
CHARLES	67	101	168	-	43	43
ESSEX	90	375	465	-	99	99
FREDERICK	55	91	146	-	22	22
HAGERSTOWN	20	42	62	-	28	28
HARFORD	66	265	331	-	77	77
HOWARD	48	244	292	-	55	55
MONTGOMERY	47	159	206	-	68	68
PRINCE GEORGE'S	186	491	677	-	97	97
WOR-WIC TECH	13	36	49	-	46	46
TOTAL ALL COLLEGES	1006	3162	4168	-	908	908

STUDENT FOLLOW-UP STUDIES:

	1982 GRADUATES		1984 GRADUATES	
	COLLEGE	STATE	COLLEGE	STATE
NUMBER OF RESPONDENTS	38	415	46	488
RESPONSE RATE	43%		53%	
FULL-TIME JOB, DIRECTLY RELATED	79%	70%	65%	65%
FULL-TIME JOB, SOMEWHAT RELATED	-	3%	2%	4%
FULL-TIME JOB, NOT RELATED	-	1%	-	1%
PART-TIME JOB	16%	21%	26%	25%
TRANSFERRED, NOT EMPLOYED	-	-	-	1%
SEEKING WORK, NOT EMPLOYED	-	-	4%	2%
MILITARY, HOME RESPON, OTHER	5%	4%	2%	1%
TOTAL	100%	100%	100%	100%
TRANSFERRED, REGARDLESS OF EMPL	13%	10%	11%	13%
ACHIEVED PERSONAL GOAL	95%	98%	100%	97%
SATISFIED WITH INSTR IN PROGRAM	95%	95%	93%	96%
AMONG FULL-TIME EMPLOYEES				
MEDIAN ANNUAL SALARY	$16,600	$16,640	$18,000	$18,812
NO. REPORTING SALARY DATA	24	270	27	276
BEGAN NEW JOB AFTER COLLEGE	69%	85%	90%	85%
SATISFIED WITH EMPLMNT PREP	93%	95%	90%	92%

DISCIPLINE CREDIT HOUR DATA: NURSING, RN

	FY82	FY83	FY84	FY85	82-85 CHG
HIGHER ED PRICE INDEX	226	240	253	270	+19%
STATEWIDE COST:					
ALL DISCIPLINES	$87	$94	$101	$109	+25%0000
THIS DISCIPLINE	$145	$152	$160	$176	+21%
COLLEGE COST:					
ALL DISCIPLINES	$81	$106	$112	$123	+52%
THIS DISCIPLINE	$105	$146	$130	$169	+61%
STUDENT CREDIT HOURS:					
STATEWIDE					
COLLEGE					

THESE COSTS ARE DISCIPLINE COSTS, NOT PROGRAM COSTS;
A SINGLE DISCIPLINE MAY SUPPORT SEVERAL PROGRAMS.

MARYLAND ANNUAL JOB OPENINGS TO 1990:

	LOCAL	STATEWIDE
NURSE, PROFESSIONAL	37	1567

JOB OPENINGS ARE FOR WAGE AND SALARIED EMPLOYEES ONLY. OPENINGS MAY BE AVAILABLE IN OTHER OCCUPATIONS. SEE MANPOWER PROJECTIONS. SOME STUDENTS ARE ALREADY EMPLOYED WHILE ATTENDING THE COMMUNITY COLLEGE; THEREFORE OPENINGS MAY NOT BE NEEDED FOR ALL GRADUATES.

PDM QUANTITATIVE CRITERIA CHECKS INDICATE:

ENROLLMENT DECREASED AT LEAST 10% AND BY 10 STUDENTS LAST YEAR
DISCIPLINE COST INCREASED AT LEAST 20% LAST YEAR

PROGRAM EVALUATED WITH SBCC PROGRAM EVALUATION SYSTEM 85

SOURCES: HEGIS REPTS, FOLLOW-UP STUDIES, DET MANPOWER DATA & DISCIPLINE COST ANALYSIS. DATA ARE SUBJECT TO CONFIRMATION BY COLLEGE.

Appendix B

USING INFORMATION TO SUPPORT INSTRUCTIONAL PROGRAM EVALUATION

Program evaluation in Maryland community colleges is part of an integrated system for program implementation and evaluation, with both pieces woven together by an extensive data base. The process for implementing and evaluating instructional programs in Maryland community colleges is diagrammed on the following page. New programs begin with local needs. Faculty members and administrators see educational needs among students and employers and respond with program ideas. By December, the college submits the titles for its proposed programs to the State Board for Community Colleges (SBCC) and the titles are printed in the State Plan for Community Colleges in Maryland. In June, the college submits Letters of Intent that describe the goals and nature of the proposed programs. The SBCC acts on the Letters of Intent at its July meeting, raising questions as necessary and making suggestions for program development. Often the questions arise from the Program Data Monitoring System. For example, a college could propose a new program in Recreation Technology; statewide data about employment of graduates of existing Recreation programs may indicate that a new program would have great difficulty with job placement.

In November, the colleges submit full program proposals. The proposals are analyzed by the SBCC staff with an eye toward employment possibilities, student interest, and cost. Again, the Program Data Monitoring System is used to establish benchmarks for reasonable projections in the proposals. The SBCC acts on the program proposals at the December meeting. Following SBCC action, the programs are sent to the State Board for Higher Education (SBHE) for approval,. The Division of Vocational-Technical Education (DVTE) of the Maryland State Board of Education also reviews the proposals for federal funding. Approved programs are generally implemented the following September, about 15 months after the Letter of Intent was submitted.

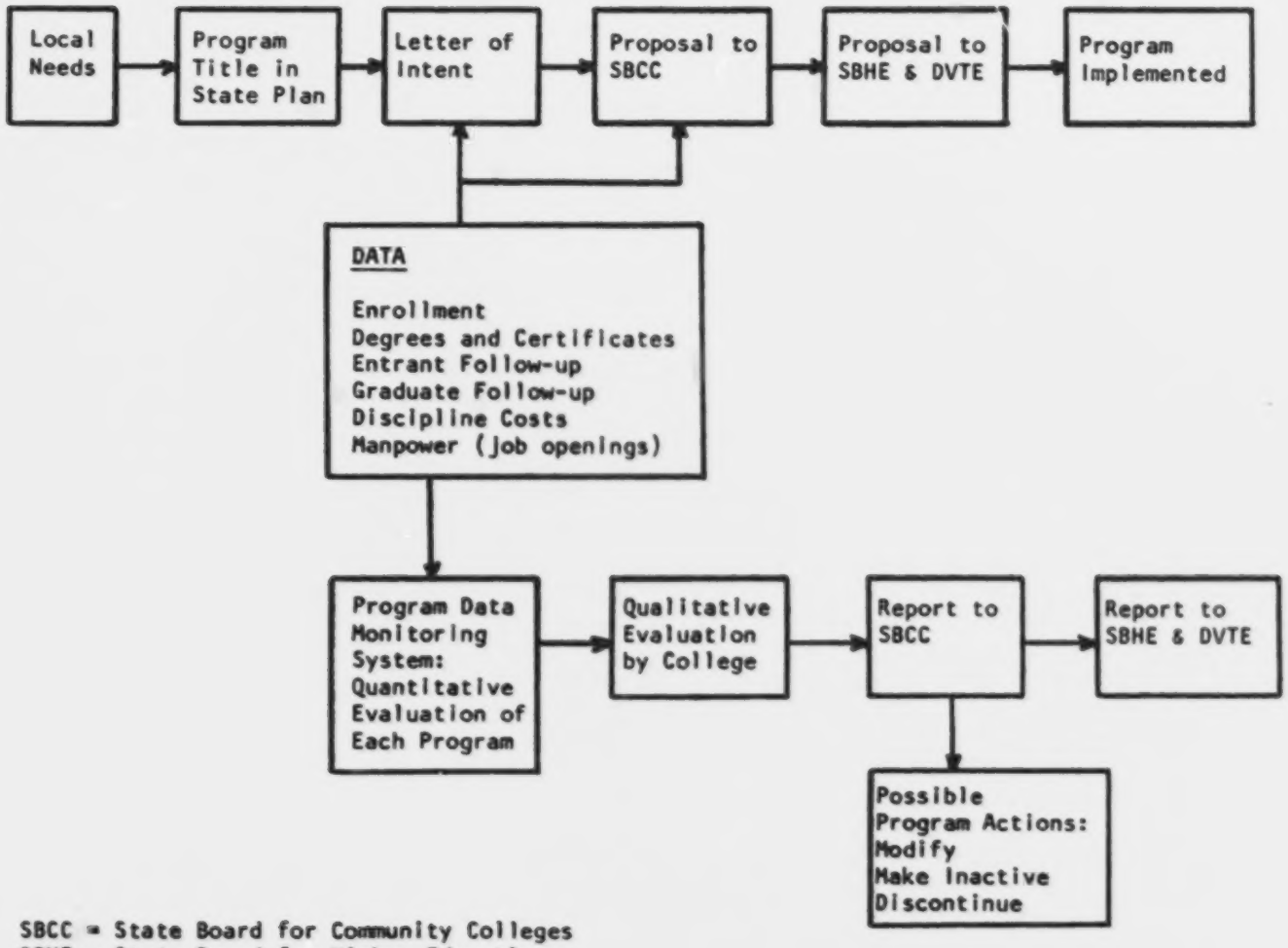
Program evaluation is a two-step process in Maryland community colleges. The first step is a quantitative evaluation. Each April the SBCC staff evaluates each program at each college using the Program Data Monitoring System. The PDM System produces one computer page for each program and displays trends in enrollment, degrees, and discipline costs. Employment and transfer information from entrant and graduate follow-up also is shown. The printout is sent to the colleges for verification in May.

In June, the SBCC requests colleges to conduct a qualitative evaluation, the second step in the process. Typically, the local qualitative evaluation is done with a committee of faculty, academic administrators, and institutional research staff members. The committee draws on their experiences, conducts a deeper analysis of existing data, and seeks more information from students or employers. The qualitative evaluations are reviewed and compiled by the SBCC and distributed to the SBHE and DVTE. The most recent Program Evaluation Report was 189 pages in length and included the questions asked by the SBCC and the college responses to each question. Data Processing programs were evaluated at each college statewide during the last year, and the Program Evaluation

Report contains a summary of the statewide evaluation. During the first eight complete cycles of the evaluation system, 381 programs were evaluated. Many programs were improved through changes in their curriculum, staffing, recruiting, and retention. Seventy-eight programs were discontinued.

Maryland State Board for Community Colleges

PROGRAM IMPLEMENTATION AND EVALUATION



SBCC = State Board for Community Colleges
SBHE = State Board for Higher Education
DVTE = Division of Vocational-Technical Education
Maryland State Department of Education

ERIC Clearinghouse for Junior Colleges
OCT 10 1986